IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

CORDIS CORPORATION, Plaintiff, v. BOSTON SCIENTIFIC CORPORATION, BOSTON SCIENTIFIC SCIMED, INC., and MEDTRONIC AVE, INC. Defendants.	)	Civil Action No. 97-550-SLR (consolidated)
BOSTON SCIENTIFIC CORPORATION, Plaintiff, v. CORDIS CORPORATION, ETHICON, INC. and JOHNSON & JOHNSON INTERVENTIONAL SYSTEMS CO., Defendants.	)	Civil Action No. 98-19-SLR

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MEMORANDUM OPINION

Dated: March 31, 2006
Wilmington, Delaware

ROBINSON, Chief Judge

I. INTRODUCTION

Plaintiff Cordis Corporation ("Cordis") originally filed this patent infringement action on October 3, 1997 against defendants Medtronic AVE, Inc., Boston Scientific Corporation and Scimed Life Systems, Inc.[1] Cordis alleges that Medtronic infringed certain claims of United States Patent Nos. 4,739,762 (the "'762 patent") and 5,195,984 (the "'984 patent"). Cordis accuses BSC of infringing certain claims of the '762 patent and United States Patent Nos. 5,902,332 (the "'332 patent"), 5,643,312 (the "'312 patent"), and 5,879,370 (the "'370 patent"). In the fall of 2000, a jury trial was held to decide issues of infringement and damages. The jury found that the accused stents of Medtronic infringed, under the doctrine of equivalents, the asserted claims of the '762 patent. The district court granted JMOL of noninfringement, finding that Cordis was estopped from asserting infringement under the doctrine of equivalents. Cordis appealed the JMOL decision to the Federal Circuit. The Federal Circuit reversed this court's original claim construction and remanded the case for further proceedings. Cordis Corp. v. Medtronic AVE, Inc., 339 F.3d 1352 (Fed. Cir. 2003) ("Cordis"). On March 14, 2005, after a retrial of the case, the jury found the asserted claims of the '762 and '984 patents infringed and

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[1]Defendant Medtronic AVE, Inc. will be referred to as "Medtronic." Defendants Boston Scientific Corporation and Scimed Life Systems, Inc. will be referred to collectively as "BSC."

nonobvious. (D.I. 1358)[2] Following that verdict, the court entered judgment in favor of Cordis and against Medtronic on March 31, 2005. (D.I. 1374) On March 24, 2005, the jury found that BSC's NIR stent infringed claim 23 of the '762 patent, which the jury concluded was nonobvious. (D.I. 1366) Pursuant to this verdict, the court entered judgment in favor of Cordis and against BSC on March 31, 2005. (D.I. 1375)

Before the court are a motion to amend the latter judgment by BSC; a motion for judgment as a matter of law and, in the alternative, for a new trial by BSC; and a cross motion to amend the judgment by Cordis. (D.I. 1382, 1385, 1400) For the reasons stated, the motion to amend by BSC is granted in part and denied in part; the motion for judgment as a matter of law and, in the alternative, for a new trial by BSC is denied; and Cordis' cross motion to amend is granted in part and denied in part.

II. BACKGROUND

The dispute relates to balloon expandable stents. Balloon expandable stents and other types of stents are used to treat diseased blood vessels in the heart and in other areas of the body. A stent is a small device that holds open an artery just like scaffolding inside a tunnel keeps the tunnel from collapsing. At issue in this case are balloon expandable stents

[2]Unless otherwise noted, the docket item ("D.I.") numbers cited in this memorandum opinion refer to Civ. No. 97-550-SLR.

which are used in conjunction with angioplasty balloons. The stent is placed on a balloon and inserted into an artery via a catheter. Once the balloon is at the area of blockage, it is inflated, which causes the stent to expand and press against the vessel wall, thereby opening the artery. The balloon is then deflated and removed, leaving the expanded stent in the artery to keep the vessel open and allow blood to flow.

The '762 patent, entitled "Expandable Intraluminal Graft, and Method and Apparatus for Implanting an Expandable Intraluminal Graft," includes both apparatus and method claims. The apparatus claims are directed to an expandable tubular member that serves as vascular scaffolding. The method claims of the '762 patent describe the process of implanting the stent into a diseased vessel.

Claim 23 of the '762 patent is an apparatus claim which is dependent upon claim 13.[3] The claims read:

> 13. An expandable intraluminal vascular graft, comprising:
> a thin-walled tubular member having first and second ends and a wall surface disposed between the first and second ends, the wall surface having a substantially uniform thickness and a plurality of slots formed therein, the slots being disposed substantially parallel to the longitudinal axis of the tubular member;
> the tubular member having a first diameter which permits intraluminal delivery of

[3]Claim 13 was cancelled during reexamination of the '762 patent. ('762 reexamination certificate, col. 1, ln. 34)

> the tubular member into a body passageway having a lumen; and
> the tubular member having a second, expanded and deformed diameter, upon the application from the interior of the tubular member of a radially, outwardly extending force, which second diameter is variable and dependent upon the amount of force applied to the tubular member, whereby the tubular member may be expanded and deformed to expand the lumen of the body passageway.
>
> 23. The expandable intraluminal vascular graft of claim 13, wherein the outside of the wall surface of the tubular member is a smooth surface, when the tubular member has the first diameter.

('762 patent, col. 11, ln. 63 - col. 12, ln. 14; col. 12, lns. 56-59)

Claim 44 of the '762 patent, a method claim added during reexamination, reads:

> 44. A method for implanting a balloon expandable stent prosthesis within a passageway of a coronary artery having an area of stenosis, comprising the steps of:
> utilizing a thin-walled, tubular member as the stent prosthesis, the tubular member having a plurality of slots formed therein, the slots being disposed substantially parallel to the longitudinal axis of the tubular member;
> disposing the stent prosthesis and catheter having an inflatable balloon portion;
> inserting the stent prosthesis and catheter within the passageway by percutaneous catheterization;
> delivering the catheter and stent prosthesis to the area of stenosis without surgically exposing the area of the passageway; and
> expanding and deforming the stent prosthesis at the area of stenosis within the

> coronary artery passageway by expanding the inflatable balloon portion of the catheter associated with the stent prosthesis to force the stent prosthesis radially outwardly into contact with the area of stenosis in the passageway, the stent prosthesis being controllably deformed beyond its elastic limit.

('762 reexamination certificate, col. 3, lns. 22-44)

The '332 patent, entitled "Expandable Intraluminal Graft," was filed on November 24, 1992 as a continuation of patent application no. 07/657,296, which issued as the '984 patent.

Claim 22 of the '332 patent reads:

> 22. A balloon expandable coronary stent for delivery to a coronary artery through an access artery, the stent comprising:
> at least two segments, each segment having a generally tubular shape and a first end and a second end;
> each segment having a plurality of openings that are disposed substantially parallel to the longitudinal axis of the segment, the openings forming a series of alternating open and closed portions in each of the first and second ends of the segment;
> the segments being arranged so that at least one closed portion of the second end of a first segment is in longitudinal alignment with a closed portion of the first end of a second segment;
> a connector extending between and connecting the aligned closed portion of the second end of the first segment to the aligned closed portion of the first end of the second segment, the connector being an elongate flexible member that extends between and is integrally formed with the aligned closed

> portions;
> whereby each of the segments may be displaced at an angle with respect to the longitudinal axis of an adjacent segment when the stent is delivered through a curved portion of the access or coronary arteries; and
> the stent having a first diameter which permits intraluminal delivery of the stent through the access artery by percutaneous catheterization and a second, expanded and deformed diameter, the second diameter being attained upon the application from the interior of the stent of a radially, outwardly directed force by inflating a balloon, which second diameter is variable and dependent upon the amount of force applied to the stent, whereby the stent may be expanded and deformed beyond its elastic limit to expand the lumen of the coronary artery.

('332 patent, col. 13, ln. 13 - col. 14, ln. 13)

III. STANDARD OF REVIEW

A. Renewed Motion for Judgment as a Matter of Law

BSC has renewed its motion for judgment as a matter of law pursuant to Fed. R. Civ. P. 50(b). To prevail on a renewed motion for judgment as a matter of law following a jury trial, the moving party "'must show that the jury's findings, presumed or express, are not supported by substantial evidence or, if they were, that the legal conclusion(s) implied [by] the jury's verdict cannot in law be supported by those findings.'" Pannu v. Iolab Corp., 155 F.3d 1344, 1348 (Fed. Cir. 1998) (quoting Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888, 893

(Fed. Cir. 1984)). "'Substantial'" evidence is such relevant evidence from the record taken as a whole as might be acceptable by a reasonable mind as adequate to support the finding under review." Perkin-Elmer Corp., 732 F.2d at 893. In assessing the sufficiency of the evidence, the court must give the non-moving party, "as [the] verdict winner, the benefit of all logical inferences that could be drawn from the evidence presented, resolve all conflicts in the evidence in his favor, and in general, view the record in the light most favorable to him." Williamson v. Consol. Rail Corp., 926 F.2d 1344, 1348 (3d Cir. 1991); Perkin-Elmer Corp., 732 F.2d at 893. The court may not determine the credibility of the witnesses nor "substitute its choice for that of the jury between conflicting elements of the evidence." Perkin-Elmer Corp., 732 F.2d at 893. In sum, the court must determine whether the evidence reasonably supports the jury's verdict. See Dawn Equip. Co. v. Kentucky Farms Inc., 140 F.3d 1009, 1014 (Fed. Cir. 1998).

Likewise, in order to promote finality after trial, as well as to preserve the historical function of the jury as the trier of facts, the court "ought to grant a new trial on the basis that the verdict was against the weight of the evidence only where a miscarriage of justice would result if the verdict were to stand." Williamson v. Consolidated Rail Corp., 926 F.2d 1344, 1352 (3d Cir. 1991).

B. Motion for a New Trial

In the alternative to its motion for judgment as a matter of law, BSC has moved for a new trial pursuant to Fed. R. Civ. P. 59(a). Federal Rule of Civil Procedure 59(a) provides, in pertinent part:

> A new trial may be granted to all or any of the parties and on all or part of the issues in an action in which there has been a trial by jury, for any of the reasons for which new trials have heretofore been granted in actions at law in the courts of the United States.

Fed. R. Civ. P. 59(a). The decision to grant or deny a new trial is within the sound discretion of the trial court and, unlike the standard for determining judgment as a matter of law, the court need not view the evidence in the light most favorable to the verdict winner. See Allied Chem. Corp. v. Darflon, Inc., 449 U.S. 33, 36 (1980); Olefins Trading, Inc. v. Han Yang Chem. Corp., 9 F.3d 282 (1993); LifeScan Inc. v. Home Diagnostics, Inc., 103 F. Supp.2d 345, 350 (D. Del. 2000) (citations omitted). See also 9A Wright & Miller, Federal Practice and Procedure § 2531 (2d ed. 1994) ("On a motion for new trial the court may consider the credibility of witnesses and the weight of the evidence."). Among the most common reasons for granting a new trial are: (1) the jury's verdict is against the clear weight of the evidence, and a new trial must be granted to prevent a miscarriage of justice; (2) newly-discovered evidence exists that

would likely alter the outcome of the trial; (3) improper conduct by an attorney or the court unfairly influenced the verdict; or (4) the jury's verdict was facially inconsistent. See Zarow-Smith v. N.J. Transit Rail Operations, 953 F. Supp. 581, 584-85 (D.N.J. 1997) (citations omitted). The court must proceed cautiously, mindful that it should not simply substitute its own judgment of the facts and the credibility of the witnesses for those of the jury. Rather, the court should grant a new trial on the basis that the verdict was against the weight of the evidence only where a miscarriage of justice would result if the verdict were to stand. See Williamson v. Consol. Rail Corp., 926 F.2d 1344, 1352 (3d Cir. 1991); EEOC v. State of Del. Dep't of Health and Soc. Servs., 865 F.2d 1408, 1413 (3d Cir. 1989).

C. Motion to Amend/Correct the Judgment

Pursuant to Fed. R. Civ. P. 59(e), BSC has moved to amend the judgment entered against it by the court on March 31, 2005. Cordis has filed a cross motion to amend the orders of judgment involving BSC. The purpose of a motion for reconsideration is to "correct manifest errors of law or fact or to present newly discovered evidence." Max's Seafood Café by Lou-Ann, Inc. v. Quinteros, 176 F.3d 669, 677 (3d Cir. 1999). A motion to alter or amend the judgment pursuant to Fed. R. Civ. P. 59(e) must rely on one of three major grounds. See North River Ins. Co. v. CIGNA Reinsurance Co., 52 F.3d 1194, 1218 (3d Cir. 1995). Accordingly,

a court may alter or amend its judgment if the movant demonstrates at least one of the following: (1) a change in the controlling law; (2) availability of new evidence not available when summary judgment was granted; or (3) a need to correct a clear error of law or fact or to prevent manifest injustice. See Max's Seafood, 176 F.3d at 677.

IV. DISCUSSION

A. Motions to Amend

BSC has moved to amend the judgment in the instant action. BSC asserts the following as the grounds for its motion:

> [T]he Judgment only incorporates the jury verdict of March 24, 2005 (D.I. 1366), but does not incorporate the Notice of Withdrawal of Claims Based on U.S. Patent No. 5,102,417, dated March 22, 2000 (D.I. 662), the jury verdict, dated December 11, 2000 (D.I. 182 (in C.A. 98-197-SLR)), the Court's Memorandum Opinion and Order, dated March 28, 2002 (D.I. 1128), and the Court's Memorandum Order, dated May 15, 2002 (D.I. 1153).

(D.I. 1382 at 1-2) BSC also asserts that the court's ruling (D.I. 1252, Sept. 22, 2004, Tr. 27) mandates deferral of the issue of damages for BSC's infringement of claim 23 of the '762 patent "until after all relevant liability issues are determined through final appeal." (Id. at 2) Cordis agrees that the entry of an amended judgment is appropriate, but disagrees with the BSC's proposed judgment and submits a cross-motion to amend the judgment which contains its own proposed judgment. In light of the fact that the parties agree that the entry of an amended

judgment is needed to clarify the respective positions of the parties, the court shall seek to assist the parties with this issue.

In their motions to amend the judgment, the parties have identified five particular areas of disagreement. First, BSC argues that the issue of damages has been stayed pending appeal such that judgment should not be entered in Cordis' favor on this issue. Second, BSC contends that judgment should only be entered in Cordis' favor with respect to the validity of claim 23 of the '762 patent for obviousness because that was the only validity issue decided at trial. As its next contention, BSC argues that the issuance of an injunction should be stayed pending BSC's appeal. Fourth, BSC maintains that judgment should be entered in BSC's favor with respect to the patent claims that Cordis withdrew before trial. Finally, BSC argues that the court should exercise its discretion and order each party to bear its own costs of litigation.

1. Damages

Pursuant to the court's decision at the September 22, 2004 teleconference with the parties, the damages issues in this case, having been bifurcated from the liability issues, shall be deferred until all validity and infringement issues are decided finally through appeal. (D.I. 1253 at 27:8-9, resolving that "[d]amages will be bifurcated until we have addressed as a final

matter validity and infringement.") The reasons for this decision are more fully explained in the court's memorandum order in this case denying Cordis' motion to reinstate and update the damage verdicts, which has issued concurrently with this memorandum opinion.

2. Validity of Claim 23 of the '762 Patent

BSC argues that judgment should only be entered in favor of Cordis and against BSC with respect to the validity of claim 23 of the '762 patent. (D.I. 1410 at 3) In support of this contention, BSC first asserts that "the only validity issue decided by the jury at 2005 trial was whether claim 23 was invalid for obviousness in view of the prior art Ersek patent and Palmaz RSNA Abstract." (Id.) Secondly, BSC contends that a general judgment of validity of claim 23 of the '762 patent would be improper by "ignor[ing] the fact that BSC has asserted an independent invalidity defense based on the prior art Palmaz monographs in Cordis's case on the '762 patent against BSC's Express, Taxus and Liberté stents." (Id., citing Cordis Corp. v. Boston Scientific Corp., C.A. 03-027-SLR) Nevertheless, the court finds that a general judgment of validity of claim 23 of the '762 patent is appropriate in this case.

First, the court has previously used a form of judgment which includes a general judgment of validity for a patent claim even where the claim was challenged only on a few areas of

validity. See, e.g., D.I. 1154 (where a finding of validity was made as to claims 23, 51, and 54 of the '762 patent despite the fact that these claims were challenged only in the areas of written description and obviousness). Such a form of judgment is appropriate since a patent claim is presumed valid and the burden of proving invalidity rests with the challenger. See 35 U.S.C. § 282. Secondly, BSC chose to challenge the validity of claim 23 at trial solely on the issue of obviousness, while it was free to offer a challenge based on several additional invalidity defenses. The failure to offer defenses other than obviousness should not permit BSC to limit the scope of the judgment as to the validity of claim 23 of the '762 patent.[4] Finally, BSC asserted a declaratory judgment action which argued that the '762 patent is "invalid for failure to comply with one or more of the requirements of Title 35, United States Code, including, but not

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[4]As for BSC's assertion that a general validity judgment as to claim 23 of the '762 would fail to account for BSC's independent invalidity defense in a related case based on the prior art Palmaz monographs, that issue (as it pertains to this case) has become moot in light of the ruling of the court in a June 3, 2005 order. (Civ. No. 03-027-SLR, D.I. 339, ordering that "Cordis' motion for summary judgment that the asserted claims of the '762 patent are not invalid . . . is granted as to the asserted claims being invalidated by the Palmaz Monographs.") The memorandum opinion issued by this court with that order explained that "it is appropriate to preclude BSC's statutory bar defense in this case, given BSC's failure to timely raise the defense for either the 2000 or 2005 trials in the 97-550 case and given the absence of any newly discovered evidence in this regard." (Civ. No. 03-027-SLR, D.I. 338 at 17)

limited to, Sections 102, 103, and 112." (D.I. 4-5 at 8-9) Similarly, BSC's first affirmative defense was that the '762 patent was "invalid and void because [it] fail[s] to comply with the requirements of the patent laws of the United States, Title 35, United States Code, including, without limitation, sections 102, 103, and 112." BSC has asserted and failed to prove these arguments for the invalidity of claim 23 of the '762 patent. Thus, a general judgment of the validity of that claim is appropriate.

3. Injunction from Infringement of Claim 23 of the '762 Patent

With respect to the parties' arguments over whether an injunction should be stayed, these arguments have become moot in light of the expiration of the term of the relevant patent. Both parties agree that, had the implementation of an injunction from infringement of claim 23 of the '762 patent been appropriate in this case, such an injunction would extend only until November 7, 2005, the expiration date of the '762 patent. (D.I. 1410, ex. A at 2; D.I. 1415 at 6) Since that date has passed, the issue of whether to implement or stay such an injunction has been rendered moot.

4. Judgment as to Withdrawn Patent Claims

BSC argues that judgment should be entered in favor of BSC with respect to the following claims for which Cordis withdrew its allegations of infringement before trial: claims 51, 52 and

54 of the '762 patent; claims 17, 18, 25 and 26 of the '417 patent; and claim 24 of the '332 patent. (D.I. 1410 at 3-4) BSC argues that such a judgment is necessary "to finally resolve Cordis's allegations based on those claims." (Id. at 4) As Cordis correctly points out, the doctrine of res judicata protects a party from being sued on claims that could have been asserted in an earlier suit but were not. (D.I. 1415 at 3) Cordis agrees with BSC's original proposed form of judgment[5] and acknowledges that a dismissal with prejudice would be a final judgment on the merits. Thus, such a judgment would provide a means for resolution of Cordis' allegations based on the withdrawn claims.

5. Costs of Litigation

BSC argues that the court should exercise its discretion under Rule 54(d)(1) of the Federal Rules of Civil Procedure and Delaware Local Rule 54.1 and order each party to bear its own costs. In support of this contention, BSC suggests that the litigation involved a "lengthy, expensive, complicated and close

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[5]This proposed form of judgment also includes claim 44 of the '762 patent and claim 22 of the '332 patent as among those claims which were included in Cordis' complaint which will be dismissed with prejudice. The court sees no reason to adopt BSC's revised judgment proposal when its "judgment . . . in favor of BSC and against Cordis" language would not result in an effect much different than the language of BSC's originally proposed judgment. In fact, the adoption of BSC's originally proposed judgment gives BSC a better position by dismissing additional asserted claims not included in the revised proposal.

case involving several patents, extensive discovery and motion practice, two jury trials and a bench trial." (D.I. 1410 at 15) Noting that three claims were at issue at trial, BSC argues that it "prevailed on two of those three claims, receiving verdicts that both claims are invalid and that one claim also is not infringed. Cordis only received an infringement verdict in its favor on one claim, and then only under the doctrine of equivalents and in the absence of a correct prosecution history estoppel ruling." (Id.) Despite these arguments by BSC, the court finds that Cordis is the "prevailing party" under Fed. R. Civ. P. 54(d)(1) since it succeeded in its case with respect to claim 23 of the '762 patent and is entitled to damages due to infringement. See, e.g., 2 James W. Moore, Moore's Federal Practice § 54.101 (3d ed. 2005) (noting that "[t]he cases that have interpreted the 'prevailing party' language of Rule 54(d)(1) generally state simply that the prevailing party is the party in whose favor judgment was entered, even if that judgment does not fully vindicate the litigant's position in the case"). Thus, Cordis may recover its costs. Rule 54(d)(1) creates a strong presumption that costs are to be awarded to a prevailing party, and the court does not find circumstances present in this case which mandate a divergence from this policy. See, e.g., In re Paoli R.R. Yard PCB Litig., 221 F.3d 449. 462-463 (3d Cir. 2000).

B. Motion for Judgment as a Matter of Law

Pursuant to Fed. R. Civ. P. Rule 50(b), BSC has renewed its motion for judgment as a matter of law of noninfringement and invalidity of claim 23 of the '762 patent.

1. Noninfringement

BSC argues that judgment as a matter of law of noninfringement is necessary because it contends that Cordis' evidence that the individual struts and starting material of the NIR stent are uniformly thick does not support the infringement verdict.

Pursuant to its argument for JMOL of noninfringement, BSC asserts that the only infringement issue to be decided by the jury was to determine the structure of the NIR stent that corresponds to the "wall surface" of the "tubular member" that is required to have a "substantially uniform thickness." BSC explains that the jury had to choose between "Cordis's theory that the relevant structure is simply the metal of each individual strut or the starting material and BSC's theory that the relevant structure is the tubular region that encompasses the orientation of the protruding struts whose outer surface defines the 'wall surface'." (D.I. 1419 at 3-4) BSC asserts that there was no dispute before the jury about the measurements offered by each party; instead, there was only a dispute as to what should be measured. (Id. at 4) However, this assertion by BSC is inconsistent with several stipulations made by BSC throughout

this litigation[6] which appear to show agreement that "substantially uniform thickness" was the only limitation at issue at trial for infringement. Nevertheless, if the "wall surface" to be evaluated for "substantially uniform thickness" was in fact at issue at trial, the evidence offered by the parties provided the jury with relevant context by which to decide that issue as well as to evaluate for "substantially uniform thickness" in reaching its verdict.

In further arguing for JMOL of noninfringement, BSC argues that Cordis' infringement theory equating the strut thickness with the thickness of the "wall surface" is incorrect because: (1) it is based solely on the example of the preferred embodiment made from a preexisting tube of uniform thickness; (2) it is inconsistent with the claim language; (3) it is inconsistent with

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[6]In the joint pretrial order, BSC stipulated:

> For purposes of this trial, it is admitted that the NIR stent meets **each of the limitations of claim 23 of the '762 patent**, either literally or under the doctrine of equivalents, **except for the "substantially uniform thickness" limitation.**

(D.I. 1310, tab 1 at 2) (emphasis added) Counsel for BSC again reiterated this stipulation during trial when noting that "[f]or purposes of this trial, the only issue is whether or not the substantially uniform thickness limitation is met. The others are not in dispute." (D.I. 1371 at 821:9-13) A curative instruction that was agreed upon and delivered by the court during trial further showed that BSC believed that "the only infringement issue in this case is whether the NIR stent meets the substantially uniform thickness limitation of Claim 23." (D.I. 1372 at 832:9-833:1, 847:11-19)

Cordis' own prosecution arguments in the reexamination; and (4) it is inconsistent with the Federal Circuit's decision in the Cordis-Medtronic appeal. Despite these assertions, there is substantial evidence in the record to support Cordis' infringement theory.

As for BSC's argument that Cordis' infringement theory is based solely on an example from the preferred embodiment of the patent at issue, Cordis has also offered evidence from witnesses to suggest that the thickness of the metal struts of a stent can be regarded as a measurement of wall thickness. (D.I. 1370 at 426:9-427:7-23, 429:7; D.I. 1372 at 848:17-22) Given this evidence and the contrary evidence offered by BSC, the jury was entitled to make decisions as to which evidence was credible and which theory of infringement was appropriate.

BSC next observes that the claim language requires that the "wall surface disposed between the first and second ends" of the "tubular member" must have "substantially uniform thickness." (D.I. 1419 at 5) BSC argues that, based on the court's definition of the "wall surface" limitation as requiring that "[t]he outer surface of the tubular member must be disposed in a common cylindrical plane," the thickness of the "wall surface" must take into account the placement and orientation of the struts whose outer surface defines the "wall surface." (Id. at 5-6) BSC then concludes that the thickness of the "wall surface"

of the NIR stent must be the "radial thickness of the tubular region that encompasses the orientation of the protruding struts whose outer surface defines the 'wall surface'" instead of "the thickness of the individual struts or the starting material." (Id. at 5-6) While this conclusion by BSC is plausible in light of the claim language in the patent and the claim construction by the court, it is not the only plausible conclusion which can be reached in ascertaining how to measure the thickness of the "wall surface." The precise method of measuring wall thickness was not clear from the claims and remained an issue of fact for evaluation by the jury.

BSC next argues that Cordis' infringement theory is inconsistent with Cordis' own prosecution arguments in the reexamination. BSC argues that, in seeking to distinguish the patent application from the Ersek prior art, Cordis

> told the Patent Office and the public that the thickness of the "wall surface" of a "tubular member" must take into account the orientation of the protruding struts, not just the thickness of the individual struts or the starting material, and that a device in which this thickness varies substantially because of the orientation of the protruding struts is **not** within the scope of the claimed invention.

(D.I. 1419 at 6) (emphasis in original) BSC contends that Cordis should not be allowed to support its theory of infringement with arguments that are inconsistent with the arguments it used to distinguish its patent from the prior art and secure allowance during reexamination. (Id.) BSC asserts

that Cordis "disavowed" devices "in which the struts have twisted out of the plane of the starting material" in distinguishing the Ersek invention. (D.I. 1395 at 9) In Cordis, the Federal Circuit offered insight into the particular disclaimer presented by Cordis in distinguishing its application from the Ersek prior art. As the opinion noted, Cordis had argued that the Ersek invention did not have a wall surface with "substantially uniform thickness" because, inter alia:

> The expanded metal Ersek sleeve has bridge portions that are several times as thick as the strands . . . The use of the term "substantially uniform" does not exclude some variations in dimension between the inner and outer surfaces of the wall. Even so, it is clear that Ersek's rough and irregular wall does not have substantially uniform thickness.

339 F.3d at 1361. The Federal Circuit noted that Cordis had distinguished the Ersek invention by "focus[ing] on the double thickness of the bridge portions of Ersek's walls." Id. Furthermore, it reasoned that Cordis had "disclaimed coverage of any device with a variation [in thickness] of at least 100 percent." Id. at 1362. Based on this information, Cordis' equating the strut thickness with the thickness of the "wall surface" as part of its infringement theory is not inconsistent with the arguments it presented in distinguishing the Ersek invention due to its "rough and irregular wall." The particular thickness of the "wall surface" was the focus of Cordis' distinction upon reexamination of its application, and such a

focus remained when Cordis was offering its infringement contentions against BSC.

As its final argument with respect to why the infringement theory of Cordis is incorrect, BSC argues that it is inconsistent with the Federal Circuit's decision in Cordis. In that decision, the Federal Circuit interpreted some of the claim language of the '762 patent and explained:

> The district court described the wall surface by stating that "the outer surface of the tubular member must be disposed in a common cylindrical plane." That "common cylindrical plane" is formed by an imaginary circle that intersects with the outermost point of each round strut. The thickness of the wall is equal to the diameter of each round strut, i.e., the distance between the outer point that intersects the wall surface and the corresponding inner point that intersects a similar imaginary cylindrical surface on the inside of the tubular member.

Cordis, 339 F.3d at 1362. BSC argues that, under this approach, the thickness of the "wall surface" is "the radial distance between the outer surface of the struts that define the 'wall surface' and an imaginary cylinder inside the tubular member." (D.I. 1419 at 8) The issue of whether this method of using "imaginary cylindrical surfaces" is the only method by which one can measure the thickness of a stent wall was already addressed by this court. In its February 28, 2005 order, the court stated:

> [T]he Federal Circuit's discussion with respect to measuring the thickness of a strut does not amount to a holding that one of ordinary skill would only measure thickness a certain way, as the Federal Circuit's statements were made in the context of infringement, not claim construction. Therefore, each party can

> present evidence with respect to how one of ordinary skill in the art would measure the thickness of the wall surface.

(D.I. 1337 at 5-6) Thus, the parties were free to offer evidence at trial as to whether or not one of ordinary skill in the art would use an "imaginary cylindrical surfaces" approach in determining the thickness of a stent. BSC argues that "the Court erred in excluding the Federal Circuit's explanation of how to measure thickness, which is the law of the case that binds this Court on remand, and that it would be error to continue to ignore it as Cordis urges." (D.I. 1419 at 9) The court did not err in excluding the explanation because the approach of the Federal Circuit was not a holding of how the thickness of a stent wall must be measured. The Federal Circuit case cited by BSC in support of its argument, AFG Indus., Inc. v. Cardinal IG Co., 375 F.3d 1367 1372 (Fed. Cir. 2004), addressed the "law of the case" doctrine as applied to a court's claim construction to bar the retrial of that issue, i.e., the re-construction of the claims.[7] However, as noted above, claim construction was not the basis for the Federal Circuit's holding in Cordis. Even if the court were required to apply the example for measuring stent thickness which was provided by the Federal Circuit in Cordis, it is not clear

[7]The court did note that, in certain circumstances, the presence of some ambiguity or necessity to amend an earlier claim construction could be sufficient for re-construction of the claims. AFG Indus., Inc. v. Cardinal IG Co., 375 F.3d at 1372 n.2.

that it would have affected the verdict of the jury. After having offered its "imaginary cylindrical surface" approach, the Federal Circuit noted that "a stent with round struts can have a substantially uniform thickness as long as the round struts have substantially the same diameter." Cordis, 339 F.3d at 1362. Thus, the particular orientation of the struts along the wall surface may be irrelevant to whether the wall surface has "substantially uniform thickness," and a consideration of individual strut thickness may be appropriate.

As a final contention in support of JMOL of noninfringement, BSC argues that Cordis' criticism of BSC's noninfringement defense based on the protruding U-loops of the NIR stent is inconsistent with Cordis' own prosecution arguments, the claim language, and the Federal Circuit's decision. (D.I. 1419 at 9-10) First, BSC argues that its noninfringement theory is the same theory that Cordis used when it successfully convinced the Patent Office on reexamination that the "wall surface" of the Ersek device does not have a uniform thickness. (Id. at 9) As noted above, Cordis' success upon reexamination appears to have been due to its focus on the double thickness of the Ersek device. At trial, Cordis was able to offer evidence to suggest that the NIR stent did not have double thickness. (D.I. 1370 at 443:14-444:13, 457:12-458:23, 459:10-21) BSC offered contrary evidence to suggest that the amount of protrusion was at least

100% for many U-loops. (D.I. 1372 at 968:7-969:15) Given the conflicting evidence offered by the parties as to how to measure the thickness of the "wall surface" of a stent and whether the NIR stent had sufficient variation in thickness to be considered not "substantially uniform," the jury was entitled to evaluate the credibility of the evidence and form an opinion as to infringement. The verdict reached by the jury is supported by substantial evidence and the legal conclusions which are thus implied are adequately supported by the findings of the jury. The court finds insufficient grounds are present to grant judgment as a matter of law of noninfringement.

2. Invalidity

BSC offers two primary arguments in support of its motion for JMOL of invalidity. First, BSC contends that the validity of claim 23 depends on the nonobviousness of the claimed structure because the claim is directed simply to a device, and not to a device that must be used in a particular method. (D.I. 1395 at 27-28) BSC argues that "Cordis offered irrelevant evidence of the nonobviousness of using the graft to perform that method [of intraluminal delivery and expansion on a balloon] as compared to the invasive surgical method of Ersek." (D.I. 1419 at 15) BSC contends, "The claim only describes the structure and properties of the graft, not how it must be used." (Id.) BSC also maintains that the term "intraluminal" in the preamble of claim

23 is not a claim limitation because the claim body completely described the invention while the preamble was only used to provide the purpose or intended use of the invention. (Id.) Overall, BSC argues that JMOL of invalidity is warranted because Cordis failed to prove the validity of the claim, which BSC maintains is dependent on the claimed structure and not on the purpose of the structure. (Id. at 15-16)

As for the consideration of the claim term "intraluminal," Cordis has provided evidence to suggest that it was properly considered as a claim limitation. As Cordis has correctly noted, there is no bright-line test in determining when a preamble limits the scope of a claim. In re Cruciferous Sprout Litig., 301 F.3d 1343, 1347 (Fed. Cir. 2002). However, the following factors suggest that the term "intraluminal" is limiting: the specification makes repeated reference to the invention as an "expandable intraluminal vascular graft"; the phrase "expandable intraluminal vascular graft" is used in the specification to describe the "key benefits" and "stated objects" of the invention; and the term "intraluminal" in the preamble is strongly linked to the remaining language in the claim, e.g., "a first diameter which permits intraluminal delivery". (PX 3 at 1:27-34, 3:6-34, 3:32-34, 4:62-68, 5:43-55, 6:9-13)[8] See, e.g.,

[8]PX " refers to exhibits submitted by plaintiffs at the trial held between March 4, 2005 and March 14, 2005. For example, PX 5 would be plaintiffs' exhibit number 5.

Cruciferous Sprout, 301 F.3d at 1347; Poly-America, L.P. v. GSE Lining Tech., Inc., 383 F.3d 1303, 1310 (Fed. Cir. 2004); Storage Tech. Corp. v. Cisco Sys., Inc., 329 F.3d 823, 834 (Fed. Cir. 2003); Corning Glass Works, Inc., v. Sumitomo Elec., USA, Inc., 868 F.2d 1251, 1257 (Fed. Cir. 1989).

With respect to whether Cordis provided evidence to show that the device of claim 23 was nonobvious as compared to the Ersek device, the record shows that Cordis did so. For example, the testimony of Dr. Buller suggested that the Ersek device lacked the following device requirements of claim 23: a "wall surface" disposed in a "common cylindrical plane"; a "substantially uniform thickness"; a "first diameter which permits intraluminal delivery"; a "second, expanded and deformed diameter . . . which is variable and dependent upon the amount of force"; teaching of the use of the device to "expand the lumen of body passageway"; and a "smooth surface" in the first diameter. (D.I. 1370 at 502:12-19, 503:6-504:22, 506:6-507:8, 508:7-12, 510:21-511:13) Based on the evidence presented by the parties, a reasonable jury could conclude that various structural differences exist between claim 23 of the '762 patent and the Ersek device and that a person having ordinary skill in the art would not have had any motivation to change the Ersek device to

make it more like the device in the '762 patent.[9]

BSC also argues for JMOL of invalidity by maintaining that Cordis' evidence does not support the verdict because it does not relate to "the nonobviousness of the structure of the claimed device." BSC offers similar contentions here to those offered under its first argument for JMOL of invalidity. In addition, BSC argues that the secondary considerations of nonobviousness which were advanced by Cordis only relate to "the nonobviousness of the method of intraluminally delivering and expanding a stent on a balloon, not of a claimed device." (D.I. 1419 at 17) BSC further argues JMOL of invalidity is warranted because there was no nexus between Cordis' evidence and the claimed invention and because Cordis did not offer any evidence at trial to support the verdict of validity. (Id. at 17-18)[10] The court finds that Cordis offered evidence of secondary considerations that were adequately linked to claim 23 of the '762 patent and that

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[9]BSC did offer evidence from Dr. Snyder to suggest that a motivation existed to modify the Ersek device, such as by "making the Ersek device smoother to facilitate delivery." (D.I. 1419 at 17 n.13, citing D.I. 1372 at 948:20-957:13) However, in light of the numerous structural differences between the claimed device and the Ersek device which were propounded by Cordis throughout trial and the evidence offered to refute the testimony of Dr. Snyder, a reasonable jury could have questioned the credibility of Dr. Snyder and found claim 23 of the '762 patent valid.

[10]For example, BSC argues that Cordis' evidence of "long felt need" and "failure of others to develop a solution" focused on the need for, and failure of others to develop, a **procedure** that was better than angioplasty rather than on the claimed device. (D.I. 1369 at 157:20-163:2; D.I. 1370 at 376:5-380:13)

substantial evidence at trial supported the verdict of validity. As stated in the patent, claim 23 requires that the stent attain its "second, expanded diameter" by "the application from the interior of the tubular member of a radially, outwardly extending force". '762 patent, col. 12, ll. 7-9. Such expansion by a balloon is described in the '762 patent specification. Id. at col. 9, ll. 14-20, 50-58; col. 10, ll. 11-17. So, for example, the evidence which stated that "Dr. Palmaz's balloon expandable stent" was the "medical **device"** which over the past 25 years had "made the single greatest impact to the treatment of patients with coronary artery disease" appears to provide a sufficient link between the secondary consideration of praise and the claimed invention. (D.I. 1369 at 173:11-21)

Moreover, since evidence of secondary considerations is only one of four factual inquiries on which an evaluation of obviousness is based, and because of the substantial evidence offered by Cordis to show that differences existed between the claimed invention and the prior art, the court finds that a reasonable jury could conclude that claim 23 of the '762 patent is nonobvious. See Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966); B.F. Goodrich Co. v. Aircraft Braking Sys. Corp., 72 F.3d 1577, 1582 (Fed. Cir. 1996).

The court finds no reason to grant BSC's motion for judgment as a matter of law of invalidity and obviousness. BSC has

offered insufficient evidence to show that the jury's findings were not supported by substantial evidence. Furthermore, the legal conclusions which were implied by that verdict are supported by those findings. Therefore, the court shall deny BSC's motion for judgment as a matter of law of invalidity and obviousness.

C. Motion for a New Trial

As an alternative to its renewed motion for judgment as a matter of law, BSC has moved for a new trial pursuant to Fed. R. Civ. P. 59(a) on the issues of infringement and obviousness.

1. Infringement

BSC argues that a new infringement trial is appropriate because of "prejudicial errors that likely affected the verdict." First, BSC contends that it was prejudicial error to instruct the jury wrongly during deliberations that the "wall surface" limitation was not in dispute when identifying the structure that corresponded to the "wall surface" was disputed and critical to whether the "substantially uniform thickness" limitation was met.[11] BSC contends that this instruction was false because, although BSC had stipulated for purposes of trial that the NIR stent satisfied the "wall surface" limitation, that limitation

[11]The language used in that instruction to the jury was the following: "Let me remind you that the 'wall surface' limitation is not in dispute in this case. The only limitation in dispute in this case is the 'substantially uniform thickness' limitation." (D.I. 1403)

was very much in dispute. As BSC first suggested in its argument for JMOL of noninfringement, the only issue in dispute at trial was "to **identify the structure** on the NIR stent that corresponded to the 'wall surface' of the 'tubular member' that is required by the claim to have 'substantially uniform thickness'." (D.I. 1419 at 11)(emphasis in original) In addition, BSC argues that the instruction was false because it "improperly suggested to the jury that the outer surface of the NIR stent literally is 'disposed in a common cylindrical plane' under the Court's construction of 'wall surface'." (Id.) BSC contends that the instruction suggested that there was literal infringement of the "wall surface" limitation such that "the protruding U-loops were unimportant and irrelevant." (Id. at 11-12) BSC concludes that it should be granted a new trial because "the instruction went far beyond BSC's stipulation, and appears to have steered the verdict in Cordis's favor." (Id. at 12)

As discussed above, BSC stipulated at various points during the litigation of this case that the only limitation of claim 23 of the '762 patent which remained at issue was the "substantial uniform thickness" limitation. Aside from these stipulations, the representation that this limitation was the only one at issue was repeatedly presented to the jury throughout trial by counsel for both parties, several witnesses, and in the verdict form. (D.I. 1369 at 145:1-2; D.I. 1370 at 423:2-16, 426:9-10, 464:22-

465:6; D.I. 1371 at 707:18-708:7, 819:10-17; D.I. 1372 at 848:5-11; D.I. 1373 at 1204:7-15, 1347:17-20, 1355:1-4; D.I. 1376 at 1387:10-17) The verdict was not "steered" to one party or the other due to this instruction. Had BSC wished to have the court instruct the jury that the "wall surface" limitation was at issue, it should have not clearly stipulated otherwise.

In any case, the instruction delivered by the court was wholly consistent with the stipulation by BSC that "the only issue is whether or not the substantially uniform thickness limitation is met" and that "the others are not in dispute". (1371 at 821:9-13) No prejudicial error took place when the court properly instructed the jury during deliberations as to an issue that had reached resolution by a stipulation of the parties. In addition, the pretrial stipulation by BSC went even further than the instruction by the court and stated that BSC "admitted that the NIR stent meets each limitation of claim 23 of the '762 patent, either literally or under the doctrine of equivalents, except for the 'substantially uniform thickness' limitation." (D.I. 1310, tab 1 at 2) Based on the instructions provided by the court, the jury had to have identified the "wall surface" of the NIR stent and determined that it was of "substantially uniform thickness." Substantial evidence is present in the record to support this conclusion, and no prejudicial error from the court's instruction was present or

necessary to "steer" the jury to its verdict.

As its second argument, BSC contends that it was reversible error for Cordis to treat "undesignated impeachment deposition testimony" as substantive evidence to mislead the jury into believing that BSC had admitted infringement. (D.I. 1395 at 22-26; D.I. 1419 at 12-14) BSC first argues that the impeachment deposition testimony of Mr. Brown and Dr. Low was undesignated and out-of-context such that it was improperly used as substantive evidence during the closing arguments by Cordis in violation of Fed. R. Evid. 801(d)(2)(D) and Fed. R. Civ. P. 32(a)(4). (D.I. 1419 at 12-13) Secondly, BSC argues that Cordis misled the jury with that testimony to suggest that BSC had admitted infringement. (Id. at 13-14)

Based on the record at trial, it appears that the testimony at issue was properly permitted to be referenced in the closing of Cordis. Mr. Brown's testimony was offered and admitted as a party admission pursuant to Fed. R. Evid. 801(d)(2)(D). (D.I. 1372 at 863:6-24, 975:17-976:5) That rule permits the admission of "statement[s] by [a] party's agent or servant concerning a matter within the scope of the agency or employment, made during the existence of the relationship." As for the deposition testimony of Dr. Low, it was the basis for cross-examination of Dr. Snyder and became part of the record such that reference to it in closing arguments was not improper. (D.I. 1373 at 1231:11-

12)

BSC alleges that Cordis violated the pretrial order and Fed. R. Civ. P. 32(a)(4) by introducing the testimony, arguing that a new infringement trial is necessary because BSC was "deprived . . . of the opportunity to counter-designate additional testimony to eliminate or mitigate the impact of Cordis's mischaracterization of the testimony." (D.I. 1395 at 25) BSC argues that Cordis "mischaracterized Mr. Brown's deposition testimony to undercut Dr. Richter's and Dr. Snyder's testimony." (D.I. 1395 at 24) However, the testimony of Mr. Brown that the thickness of the cross-section of the NIR stent is "a constant" and that "the entire [NIR] stent is the same thickness" was supported by Dr. Richter's testimony. (D.I. 1372 at 864:23-866:15) BSC contends that Mr. Brown's testimony was taken out of context because it "had nothing to do with the claim language or the Court's claim construction" and it was unclear if his testimony about the flaring of the U-loops on the NIR stent referred to an unexpanded or an expanded stent. (D.I. 1395 at 24) Despite this assertion, it does not appear that Cordis misrepresented the testimony of Mr. Brown, but referenced his statements and argued that those statements represented a conclusion which was consistent with Cordis' theory of infringement - that the thickness of the wall surface was to be measured by the thickness of the metal used in the struts.

BSC argues that Cordis also used the deposition testimony of Dr. Low to "undercut Dr. Richter's and Dr. Snyder's testimony by misleading the jury into believing that Dr. Low had admitted that the thickness of the 'wall' of the NIR stent is the strut thickness." (D.I. 1395 at 25) BSC cites evidence that Dr. Low had testified elsewhere in his deposition that the struts and the "wall" of the stent are not the same. (D.I. 1395 at 25, ex. D, 63:12-20) However, in the testimony referenced by Cordis, Dr. Low stated that the thickness of the wall of a stent would mean "the thickness of the metal from which it is constructed." (D.I. 1395 at ex. D, 63:4-11) While Dr. Low made a distinction between the "wall of a stent" and the "metal from which a stent is constructed," he also stated his belief that the thickness of the wall would be the thickness of the metal - a statement which was not taken out of context by Cordis and which was pertinent to the question of infringement before the jury. Contrary to BSC's assertion, this testimony of Dr. Low was not used to "undercut" Dr. Richter's testimony, as Cordis referred to the consistency of the testimony of Dr. Richter and Dr. Low in its closing argument in order to suggest that Dr. Snyder's inconsistent testimony was not credible. (D.I. 1373 at 1302:1-7) Cordis was entitled to make this argument based on the evidence it cited, and BSC was entitled to refute the import of such evidence or offer its own interpretation of the evidence. The jury was referred to

pertinent evidence by counsel and was properly instructed by the court as to how such evidence was to be evaluated. As noted above, substantial evidence was present to support the conclusions of the jury. Thus, in light of the evidence and arguments offered by the parties, the court finds that no prejudice resulted against BSC which would warrant a new trial.

2. Obviousness

BSC alleges three areas of prejudicial error that it believes "very likely affected the verdict" and should warrant a new trial on obviousness. First, BSC argues that it was prejudicial error to prevent BSC from addressing the method claims to which Cordis' nonobviousness evidence was improperly related. (D.I. 1395 at 33-36) While BSC provides a compelling argument that some of the evidence of secondary considerations offered by Cordis may not have had a strong connection to the claimed invention, the use of such evidence by Cordis was not an assertion of nonobviousness with respect to any of the claims other than claim 23. For BSC to have offered evidence to distinguish claim 23 from the other claims of the '762 patent would have needlessly provided information to the jurors about claims which were irrelevant to the questions to be decided by them. While it is possible that the admission of such evidence of unasserted claims could have offered some contribution to the proper focus of the jury's deliberations, it is much more likely

that such evidence would have instead caused confusion to the jury that would have greatly outweighed any probative value of its admission. Thus, the court properly evaluated the evidence under Rule 403 in deciding not to permit the admission of that evidence.

As its second contention in support of a new trial on obviousness, BSC argues that it was prejudicial error to prevent BSC from using Cordis' admission during "Project Olive" about the "key importance of flexibility" to rebut any nexus between Cordis' evidence of industry success and the "rigid claimed stent." (D.I. 1395 at 33-36) BSC argues that although Cordis admits flexibility was critical to commercial success, flexibility was not a feature of the device claimed in claim 23. (D.I. 1395 at 35) Nevertheless, the evidence of "Project Olive" was appropriately excluded from evidence. While BSC claims that it was prevented from offering evidence to rebut the alleged nexus, this is not the case. At various points during trial, BSC specifically offered evidence comparing the flexibility of the NIR stent with that of the Palmaz-Schatz stent in an attempt to show that the superior flexibility of the NIR stent made it successful. Dr. Richter's testimony focused on that point. (D.I. 1371 at 760:20-761:24, 762:11-18, 763:5-9, 764:15-22) During the cross-examination of Dr. Timothy Fischell, counsel for BSC had him admit that the superior flexibility of the NIR stents

was "one reason that they began to pick up market share from the original Palmaz/Schatz stents. They were viewed as a little easier to push down the coronaries." (D.I. 1369 at 200:25-201:12) The evidence of "Project Olive" would have been cumulative of this evidence offered by BSC and also would bring the risk of confusion to the jury if admitted. For example, BSC had cited "Project Olive" evidence during the 2000 trial to argue that "If the [NIR stent] was equivalent, would they be thinking about . . . spending 325 million for something that's equivalent to what they already had?" (Civ. No. 98-197-SLR, D.I. 203 at 2675:10-13) The relevance of such evidence during the 2000 trial was not present in the 2005 trial because there was no assertion of infringement under the doctrine of equivalents in the retrial. The fact that "Project Olive" evidence could raise such a concern in the minds of the jurors suggests that its probative value in the 2005 trial would be substantially outweighed by the risk of confusion to the jurors if it had been admitted. The court properly weighed such evidence of "Project Olive" under Rule 403 and decided not to permit its admission.

As its third argument for a new trial on obviousness, BSC maintains that it was prejudicial error to allow Cordis' to treat "admittedly misleading impeachment material" as substantive evidence to "mislead the jury into believing that the Ersek sleeve is like a 'stapler'." (D.I. 1395 at 36-39) BSC contends

that it was prejudiced when the court allowed Cordis to cross-examine Dr. Snyder about characterizations of the Ersek device by Dr. Ersek and Dr. Heuser and then refer to that testimony during closing arguments. (Id.) These characterizations, used by Cordis for impeachment of Dr. Snyder, consisted of a description by Dr. Ersek of the Ersek device as a "staple-like device" in his curriculum vitae and an excerpt from Dr. Heuser's trial testimony in the Cordis-Medtronic trial during which he purportedly agreed with Dr. Ersek's characterization. (Id.) As the court noted at trial, an expert may properly be impeached by evidence such as this. (D.I. 1372 at 1044:11-15) Furthermore, the court noted that such impeachment evidence, once made part of the record, could be read or referenced during closing arguments, but could not be offered into evidence. (D.I. 1372 at 1044:19-20, 1047:24; D.I. 1373 at 1230:20-1231:12) With respect to BSC's allegation that Cordis misled the jury with its use of this impeachment evidence, that does not appear to be the case. Dr. Ersek had described the Ersek device in the following manner on his curriculum vitae: "Valve seat. A new **staple-like device** to allow for the rapid and certain installation of prosthetic and transplanted heart valves . . . ." (D.I. 1372 at 1058:21-23; D.I. 1395, ex. F)(emphasis added) In impeaching Dr. Snyder, Cordis read the statement of Dr. Heuser where he testified that he agreed with that characterization of the Ersek device as

"staple-like". (D.I. 1372 at 1060:1-7) While, in its brief, BSC cites evidence from the Cordis-Medtronic trial to suggest that neither Dr. Ersek nor Dr. Heuser believed that the Ersek device was "a staple-like device" (D.I. 1395 at 37-38), this does not mean that Cordis mischaracterized the contrary evidence which it used for impeachment of Dr. Snyder. During closing arguments, Cordis was entitled to remind the jury of the impeachment evidence it cited at trial and it accurately described the substance of such evidence. BSC was entitled to refute this evidence and did so by questioning Dr. Snyder and offering its own arguments in closing to suggest that the Ersek device was not "staple-like". (D.I. 1372 at 1078:4-21; D.I. 1373 at 1334:17-1337:8) As the record shows, no prejudice against BSC occurred due to the court's rulings on this evidence.

Finally, BSC argues that a new trial is warranted on the issue of obviousness because the nonobviousness verdict reached by the jury was against the weight of the evidence. As noted in the discussion of BSC's motion for judgment as a matter of law of invalidity, substantial evidence was present to support the jury's verdict of nonobviousness. In addition, BSC is unable to identify any compelling evidence to suggest that a miscarriage of justice would occur if this verdict were to stand.

Based on the evidence offered at trial and the arguments advanced by the parties in their post-trial briefs, there is no

reason for the court to grant a new trial on either obviousness or infringement. The jury's verdict was well-supported by the evidence and BSC has failed to cite the presence of any prejudice which would have likely influenced that verdict. Therefore, the court shall deny BSC's motion for a new trial on the issues of obviousness and infringement.

V. CONCLUSION

For the reasons stated, BSC's motion to amend the judgment is granted in part and denied in part; BSC's motion for judgment as a matter of law, and, in the alternative, for a new trial is denied; and Cordis' cross motion to amend the judgment is granted in part and denied in part. An order and judgment consistent with this memorandum opinion shall issue.